

DEFENSE FY2010

Advanced Aerospace Heat Exchangers

Ohio Aerospace Institute

Ohio University

Cutler Hall

Athens, OH 45701

\$750,000

The recipient believes this is a valuable use of taxpayers' money as it will improve our national security. The carbon foam based heat exchangers developed during this project are a light-weight alternative that will help numerous military weapons systems with heat management issues resulting from increased usage of heat-producing electronics. The recipient also believes this is a valuable use of the taxpayers' money because the team will be instrumental in conducting research ultimately leading to the creation of a highly trained and skilled work force for well-paying employment for Ohio's future.

Distributed Power from Wastewater

Ohio University

Cutler Hall

Athens County, OH 45701

\$2,600,000

The recipient believes this is a valuable use of taxpayers' money as it will provide environmental and national security benefits by creating technology that will make military base camps more self-sufficient and more energy efficient. The new technology could reduce ammonia emissions by up to 37% and reduce CO2 emissions by at least 1%. In addition, by using human waste as fuel, base camps have to transport less fuel which not only makes them more mobile, it would reduce our reliance on imported sources of energy through the production of bio-based renewable energy. The recipient also believes this is a valuable use of the taxpayers' money because this project will significantly boost an economically distressed region of Ohio as new manufacturing plants that will produce this technology are projected to provide at least 100 jobs within the next four years.

Hybrid Bearing

The Timken Company

P.O. Box 6930

Canton, OH 44706

\$750,000

The recipient believes this is a valuable use of the taxpayers' money because current standard aerospace bearings are not adequate for the demands of the Joint Strike Fighter engine or for many of our existing engines. New requirements placed on weapons platforms, as well as continued high usage in extreme conditions, are stressing current bearings. This project would create an improved bearing that is tough, corrosion resistant and able to tolerate the high speeds and temperatures of expanding mission requirements. This project will have a facility in the Ohio's Sixth district.

Supply Chain Materiel Information Management System

Newbold Technologies
114 West Fifth Street
East Liverpool, OH 43920
\$2,000,000

The recipient believes this is a valuable use of the taxpayers' money because it would create software that will provide a single, integrated information management system for use across the entire Navy to improve the quality and timeliness of readiness-oriented assessments, readiness-based spare part analyses, spare/repair part procurements and improvements in materiel and maintenance response times. In addition, this project would create high quality IT jobs in Ohio's Sixth District.